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APPLICATION NO. FILING DATE		ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,786	10/008,786 11/13/2001		Ioannis Pavlidis	H0002443-02	4745
128	7590	01/17/2003			
HONEYW	ELL INT	ERNATIONAL	EXAMINER		
101 COLUMBIA ROAD P O BOX 2245				VERBITSKY, G	AIL KAPLAN
MORKISTO	MORRISTOWN, NJ 07962-2245			ART UNIT	PAPER NUMBER
				2859	
				DATE MAILED: 01/17/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No. 10/008,786 Applicant(s)

Pavlidis et al.

Examiner

Gail Verbitsky

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The MAILING DATE of this communication appears	on the cover sheet with the correspondence address
Period for Reply	
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET THE MAILING DATE OF THIS COMMUNICATION.	
<ul> <li>Extensions of time may be available under the provisions of 37 CFR 1.136 (a).</li> <li>mailing date of this communication.</li> </ul>	In no event, however, may a reply be timely filed after SIX (6) MONTHS from the
· If the period for reply specified above is less than thirty (30) days, a reply with	oly and will expire SIX (6) MONTHS from the mailing date of this communication. se the application to become ABANDONED (35 U.S.C. § 133).
Status	
1) Responsive to communication(s) filed on	
2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This ac	tion is non-final.
3) Since this application is in condition for allowance closed in accordance with the practice under Ex pa	except for formal matters, prosecution as to the merits is irte Quayle, 1935 C.D. 11; 453 O.G. 213.
Disposition of Claims	
4) 💢 Claim(s) <u>1-31</u>	is/are pending in the application.
4a) Of the above, claim(s)	is/are withdrawn from consideratio
5) Claim(s)	is/are allowed.
6) 💢 Claim(s) <u>1-31</u>	is/are rejected.
7) Claim(s)	is/are objected to.
8) Claims	are subject to restriction and/or election requirement
Application Papers	
9) The specification is objected to by the Examiner.	
10) The drawing(s) filed on is/a	re a accepted or b objected to by the Examiner.
Applicant may not request that any objection to the o	Irawing(s) be held in abeyance. See 37 CFR 1.85(a).
11) The proposed drawing correction filed on	is: a) approved b) disapproved by the Examine
If approved, corrected drawings are required in reply	to this Office action.
12) The oath or declaration is objected to by the Exam	iner.
Priority under 35 U.S.C. §§ 119 and 120	
13) $\square$ Acknowledgement is made of a claim for foreign p	riority under 35 U.S.C. § 119(a)-(d) or (f).
a) $\square$ All b) $\square$ Some* c) $\square$ None of:	
1. Certified copies of the priority documents have	ve been received.
2. Certified copies of the priority documents have	ve been received in Application No
3. Copies of the certified copies of the priority of application from the International Bure	ocuments have been received in this National Stage au (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of th	e certified copies not received.
14) Acknowledgement is made of a claim for domestic	priority under 35 U.S.C. § 119(e).
a) The translation of the foreign language provisions	· · · · · · · · · · · · · · · · · · ·
15) Acknowledgement is made of a claim for domestic	priority under 35 U.S.C. §§ 120 and/or 121.
Attachment(s)	, , , , , , , , , , , , , , , , , , ,
1) Notice of References Cited (PTO-892)	4) Interview Summary (PTO-413) Paper No(s).
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449) Paper No(s). 7.8/5 pgs</li> </ul>	5) Notice of Informal Patent Application (PTO-152)  8) Other:
Minimum ation disclosure statement(s) (P10-1449) Paper No(s). 770/ 3745	/ Of L.J. Other.

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#### **DETAILED ACTION**

#### Priority

1. Acknowledgment is made of applicant's claim for domestic priority under 35 U.S.C. 120.

### Claim Objections

2. Claim 21 is objected to because of the following informalities: Perhaps applicant should replace "claim 22" in line 1 with --claim 20--. Is this a proper interpretation of the invention?.

Appropriate correction is required.

#### Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Anbar (U.S. 5771261) and the Prior Art in the Article MEASURING INTELLIGENCE about Stanford-Binet Intelligence Quotient Test [hereinafter Prior Art] attached herein.
- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anbar (U.S. 5771261) and the Prior Art in the Article MEASURING INTELLIGENCE about Stanford-Binet Intelligence Quotient Test [hereinafter Prior Art] attached herein.

Anbar discloses a device in the field of applicant's endeavor comprising a thermal IR imaging device which provides data of at least a region of a face of a person (col. 4, lines 44-52 and col. 10, lines 11-13), a computer device transforming the data received by the IR device into a blood flow rate data which tends to change over time (slope). The computer classifies a person as a deceptive or non-deceptive by comparing the data received (blood flow rate change over time of the person to be tested) with a data kept in the computer (in a broad sense the data kept in the computer is a reference data characterized a reference or a slope threshold of a reference deceptive or non-deceptive person).

With respect to claim 5: The computer marks a region above (proximate) the eyes (col. 10, lines 45-46).

With respect to claims 6-7 and 14-15: the person is asked pre-recorded questions and the IR camera is focused on the person, the camera captures (records) the image at the time of answer, thus, during some period of time (col. 10, lines 11-13, and line 20). The computer

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identifies the changes, such as vasoconstriction of large arteries and decides if the person is deceptive.

With respect to claim 17: the device further provides measurements of one or more physiological parameters different from the blood flow rate, such as blinking of the eyes, heartbeat, a skin perfusion.

With respect to claims 8, 16, 27, 31: Anbar also discloses that the IR camera captures frames of thermal image during at least a period of time, and further the computer tracks movement of at least one region of the face (blinking) during a period of time (col. 11, steps 2-4).

Anbar does not explicitly disclose providing a slope representative of <u>demarcation</u> between change of blood flow over time for a deceptive person and for a non-deceptive person, and comparing the slope obtained as the result of testing to either one to determine if the person under test is deceptive or non-deceptive.

Prior Art states that a known (since 1910) Stanford-Binet (standardized IQ) test suggests to test a subject by asking questions, obtaining data and comparing the data obtained from a subject under the test to a corresponding data obtained from other (plurality of) subjects wherein the accepted data pertaining normal responses (accepted) lies within a Bell shape curve (slope threshold representative of a <u>demarcation</u> between data obtained from accepted and non-accepted persons), and, non-acceptable data lies on the left side of the curve.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device and method disclosed by Anbar so as to compare data obtained from one subject to the data obtained from a plurality of subjects, as taught by Stanford-Binet, so as to obtained not only comparison of the subject to other subjects, but also determining whether the data obtained from the subject is acceptable to the operator (the subject is not deceptive) or not (the subject is deceptive) by having a clear demarcation between accepted and non-accepted previously obtained reference data.

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With respect to the method claims: the method steps will be met during the normal operation of the device as stated above.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Conclusion

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8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related devices and methods.

9. Any inquiry concerning this communication should be directed to Examiner Verbitsky who can be reached at (703) 306-5473 Monday through Friday, 7:30 to 4:00 ET.

Any inquiry of general nature should be directed to the Group Receptionist whose telephone number is (703) 308-0956.

**GKV** 

December 30, 2002

Gail Verbitsky & Welle Lee

Patent Examiner, TC 2800